

CLAIMS

1. A sodium/sulfur battery comprising solid sodium for the negative electrode; liquid electrolyte constituted by soaking glycols solvent or carbonates solvent including 0.1~2.0mol of sodium salt in cell guard; and solid sulfur for the positive electrode constituted with 10~100wt% of sulfur, 0.001~50wt% of carbon and 0.001~50wt% of polyethyleneoxide.

2. A sodium/sulfur battery of the above claim 1, wherein the above sodium of the negative electrode is selected from group consisting of sodium metal, sodium powder, sodium alloy, sodium compound, carbon comprising sodium ion and sodium metal oxide.

3. A sodium/sulfur battery of the above claim 1, wherein the above sulfur of the positive electrode is selected from group consisting of active sulfur, organic sulfur, organic sulfur compound and sulfur compound such as NiS, FeS₂ or PbS.

4. A sodium/sulfur battery of the above claim 1, wherein the above sodium salt is selected from group consisting of sodium nitrate, sodium trifluoromethanesulfonate, and sodium trimethanesulfonate amide.

5. A sodium/sulfur battery of the above claim 1, wherein the above solvent among liquid electrolyte is selected from group consisting of monoethylene, diethylene, triethylene, tetraethylene, tetraethylene glycol dimethyl

ether, polyethylene glycol dimethyl ether, ethylene carbonate, propylene carbonate.